[CLAIMS]

1. A process for preparing an avian embryonic germ cell line comprising the steps of:

(i) culturing primordial germ cells (PGCs) isolated from an early avian embryo in a medium supplemented with a cell growth factor and a differentiation inhibitory factor to obtain PGC colonies;

(ii) recovering and culturing the PGCs in the same medium as in the above step by employing an avian embryonic fibroblast as a feeder cell until the cells expressing a phenotype of an embryonic germ (EG) cell are colonized; and

(iii) recovering and subculturing the cells expressing the EG cell phenotype in the same medium as in the above step to establish the EG cell line.

2. The process of claim 1, wherein the avian species is turkey, chicken, quail, pheasant or duck.

3. The process of claim 1, wherein the avian embryo is at a stage ranging from 4 to 28.

4. The process of claim 1, wherein the PGCs are derived from embryonic gonad, blood or germinal crescent.

5. The process of claim 1, wherein the growth factor is at least one selected from the group consisting of stem cell factor (SCF), basic fibroblast growth factor(bFGF),

interleukin-11 (IL-11) and insulin-like growth factor-I(IGF-I).

6. The process of claim 1, wherein the differentiation inhibitory factor is leukemia inhibitory factor (LIF).

7. The process of claim 1, wherein the medium is DMEM (Dulbecco's Modified Eagle's Medium) and its functional equivalent.

8. The process of claim 1, wherein the medium further comprises chicken serum.

9. The process of claim 1, wherein the medium further comprises at least one selected from the group consisting of pyruvic acid, glutamine and 2-mercaptoethanol.

10. The process of claim 1, wherein the avian embryonic fibroblast is a chicken embryonic fibroblast exhibiting mitotic activity.